

Abstract of the Disclosure

A device for analyzing a signal, in particular a physiological signal such as an electrocardiogram or electrogram. The signal to be analyzed is preferably one that was previously collected, filtered, sampled and digitized. The device memorizes the digitized signal (stores in memory), and analyzes it by decomposing the signal into a plurality of N elementary waves, and classifying each N elementary waves by recognizing at least one parameter characteristic of each wave, and allotting a standardized label, selected among a plurality of predetermined labels, according to one or to more of the characteristic parameters thus recognized. The decomposition of the signal is into N parameterized bump functions (1-5), where each bump function is a continuous function defined by three successive intervals, respectively, a first monotonic parameterized function, an affine function, and a second monotonic parameterized function, with one of the monotonic parameterized functions being increasing and the other decreasing. The parameterized functions are preferably half-Gaussian functions, and the affine function preferably has a null slope.